REMARKS

Reconsideration of the pending application is respectfully requested in view of the following observations.

1. In the claims

Claims 1 and 15 have been amended, and claim 17 is new.

Claims 1 and 15 have been amended to clarify that the monitored property of the transmission oscillator includes the frequency or impedance of the transmission oscillator in resonance. Support for this amendment may be found at least in paragraph [0045] of the Specification.

New claim 17 recites an assembly switchable to the transmission oscillator via a switch, said assembly causing a change in the resonant frequency of the transmission oscillator, when the measuring device has ascertained a change of the monitored property and outputted a control signal. Support for claim 17 may be found at least in paragraphs [0030], [0033], [0035], and [0046].

The claims are now considered to be placed in condition for allowance.

No new matter is introduced via the amendment to the claims.

Entry of the amendment to the claims is kindly requested.

2. Rejection of claims 1-6, 8-12, and 15 under 35 USC 103(a) as being unpatentable over US patent 5,287,112 (*Schuermann*) in view of US patent 6,905,074 (*Charrat*)

Reconsideration of the rejection is respectfully requested in view of the amendment to the claims and the following observations.

Amended claim 1 recites a communication apparatus for setting up a data connection between intelligent devices comprising a transmission oscillator, a communication element, a measuring device, and a switching apparatus. The transmission oscillator includes a coil, and the communication element is connected to the coil and to a data processing component of an intelligent device. The communication element emits search signals via the coil to receive a response from another intelligent device. The measuring device monitors a property of the transmission oscillator and outputs a control signal when ascertaining a change of the monitored property, where the monitored property includes the frequency or impedance of the transmission oscillator in resonance. The switching apparatus is connected to the

measuring device and the communication element. The switching apparatus switches on the communication element when it has received a control signal from the measuring device.

It is submitted that the proposed combination of *Schuermann* and *Charrat* fails to teach or suggest all of the features of amended claim 1. Specifically, the proposed combination does not teach or suggest the measuring device monitoring a property of the transmission oscillator including the frequency or impedance of the transmission oscillator in resonance and the switching apparatus switching on the communication element when it has received a control signal from the measuring device as required by amended claim 1.

Schuermann is directed to a transponder which communicates with an interrogator. The transponder has a resonant circuit (34) which is tuned to a specific frequency to receive energy and comprises a parallel combination of a coil (36) and a capacitor (38) (see col. 4, lines 52-55). The Office Action acknowledges that *Schuermann* does not disclose the measuring device and the switching apparatus as claimed in claim 1, and *Charrat* is relied on for the disclosure of the measuring device and the switching apparatus.

Charrat monitors the amplitude of envelope pulses to determine the presence of a contactless integrated circuit. When a contactless integrated circuit (5) is not present, the envelope pulses (SE1, SE2...SE_N) have a substantially constant amplitude (V1) (see col. 7, lines 39-41). When a contactless integrated circuit (5) is present, the amplitudes of the envelope pulses have an amplitude (V2) that is substantially lower than the amplitude V1 (see col. 7, lines 41-43). The mutual inductance (M) of the coil (L1) of the reader and the coil (L2) of the integrated circuit causes an attenuation of the magnetic field (see col. 7, lines 51-54). Since the magnetic field is attenuated, the amplitude (V2) of the envelope pulse is also substantially reduced.

Charrat does not disclose that the frequency or impedance of the coil of the transmission oscillator is being monitored in resonance as required by amended claim 1.

First, *Charrat* is silent as to the specific frequency or impedance of the coil (L1, L2) while operating in resonance. *Charrat* discusses only the effect of the presence of the contactless integrated circuit (5) on the inductance of the coil which is not the frequency or impedance of the coil. *Charrat* focuses only on monitoring the amplitude of the envelope pulses.

Second, *Charrat* does not disclose that the monitored property is a property of the transmission oscillator. Amended claim 1 has specified that the property of the transmission oscillator includes the frequency or impedance of the transmission oscillator in resonance. The amplitude of the envelope pulse cannot be considered to be a property of the coil. The amplitude of the envelope pulse in *Charrat* is not linked to the frequency or impedance of the coil such that it would cause the frequency or impedance of the coil to be monitored. *Charrat* specifically discloses that the change in the amplitude of the envelope pulse is caused by the attenuation of the magnetic field which is caused by the mutual inductance of two coils (L1, L2). None of the properties in this chain can be considered to be the frequency or impedance of the coil. Moreover, *Charrat* does not disclose that the mutual inductance of the coil is being directly monitored only that the amplitude of the envelope pulse is monitored which is a property of the envelope pulse signal. Thus, *Charrat* fails to teach or suggest the monitored property of the transmission oscillator including the frequency or impedance of the transmission oscillator in resonance.

It is further submitted that *Charrat* does not disclose a switching apparatus as required by amended claim 1. The switching apparatus of amended claim 1 switches on the communication element based on a control signal from the measuring device. While *Charrat* discloses that the embodiments have been described with features to save on the current consumption of the reader (see col. 11, lines 7-12), *Charrat* does not explicitly disclose switching on the communication element based on measuring a property of the transmission oscillator, and if a change has occurred, switching on the communication element so that the communication element can emit search signals to another intelligent device.

Accordingly, the proposed combination of *Schuermann* and *Charrat* fails to teach or suggest all of the features of amended claim 1.

Amended claim 15 contains similar features to amended claim 1 and is allowable at least for the reasons discussed above. Moreover, claims 2-6 and 8-12 depend from claim 1 and are likewise allowable for the reasons above in view of their dependency from claim 1 and their individually recited features.

New claim 17 depends from claim 1 and is allowable at least for the reasons discussed in view of claim 1. Claim 17 is further allowable for the reasons below.

Claim 17 recites an assembly switchable to the transmission oscillator via a switch, the assembly causing a change in the resonant frequency of the transmission oscillator, when

the measuring device has ascertained a change of the monitored property and outputted a control signal. In the instant application, connecting the capacitor and/or the resistor after the communication element has been turned on ensures that other intelligent devices designed for automatic data connection setup in the same way are not disturbed by a search mode (see Specification, paragraph [0008]).

The proposed combination of *Schuermann* and *Charrat* does not teach or suggest using the switchable assembly to cause a change in the resonant frequency of the transmission oscillator when the measuring device has ascertained a change of the monitored property and outputted a control signal.

First, *Schuermann* in combination with *Charrat* does not disclose the switching assembly causing a change in the resonant frequency of the transmission oscillator in response to a signal from the measuring device.

Schuermann discloses connecting capacitor (52) in parallel with tuned circuit (28) to form a new turned circuit (29) with a new, lower resonant frequency (f_2) (see col. 5, lines 13-15). Switch (50) is opened and closed in synchronism with the control of programmable divider (25). Further, by choosing frequency (f_1) to represent one logic level and frequency (f_2) to represent another logic level, information can be transmitted from the interrogator (12) to the transponder (14) (see col. 5, lines 13-19). The capacitor (56) is switched into the tuned circuit (28) to ensure that the transponder resonant circuit (34) is tuned to the signal of the interrogator (see col. 5, lines 47-52).

As noted above, it is acknowledged in the Office Action that *Schuermann* does not disclose a measuring device. Therefore, *Schuermann* cannot disclose the assembly causing a change in the resonant frequency of the transmission oscillator in response to a signal output from the measuring device. Moreover, *Schuermann* uses the capacitor (52) to switch between two frequencies (f_1, f_2) to transmit data. *Schuermann* does not disclose that the changing of the resonant frequency of the circuit using the capacitor is based on an ascertained change of the monitored property by the measuring device and a control signal from the measuring device. Thus, the capacitors in *Schuermann* are not switched into the tuned circuits based on an ascertained change of the monitored property of the oscillator.

Charrat also does not disclose the assembly causing a change in the resonant frequency of the transmission oscillator when the measuring device has ascertained a change of the monitored property and outputted a control signal. As discussed above, *Charrat* does

not disclose a monitored property of the transmission oscillator as required by amended claim 1 and therefore, cannot have the assembly cause a change in the resonant frequency when a change of the monitored property has been ascertained.

Further, *Charrat* does not disclose an assembly switchable to the transmission oscillator via a switch, where the assembly causes a change in the resonant frequency of the oscillator. The antenna circuit (20) in *Charrat* is tuned to a determined resonance frequency of 13.56 (MHz), and the antenna coil is connected in parallel with a capacitor (C1). *Charrat* does not disclose changing the resonant frequency of the antenna circuit (20) and further does not disclose switching in a capacitor (C1) to change the resonant frequency of the antenna circuit (20).

Thus, the proposed combination of *Schuermann* and *Charrat* does not disclose or suggest all of the features of new claim 17.

Therefore, withdrawal of the rejection of the claims in view of the prior art is kindly requested.

3. Rejection of claims 7 and 16 under 35 USC 103(a) as being unpatentable over US patent 5,287,112 (*Schuermann*) in view of US patent 6,905,074 (*Charrat*) and further in view of US patent 6,317,027 (*Watkins*)

Reconsideration of the rejection is respectfully requested in view of the amendment to the claims and the following observations.

Claims 7 and 16 depend from one of claims 1 or 15 and are likewise allowable in view of their dependency from claim 1 or claim 15 and their individually recited features. Moreover, *Watkins* does not cure the deficiencies of *Schuermann* or *Charrat*.

Watkins does not disclose the monitoring of a property of the transmission oscillator including the frequency or impedance of the transmission oscillator in resonance. *Watkins* merely recalibrates the antenna circuit periodically, for example every ten seconds (see col. 5, lines 61-66), and does not have a mechanism for monitoring or a device monitoring an actual property of the antenna circuit continuously.

Therefore, withdrawal of the rejection of the claims in view of the prior art is kindly requested.

4. Rejection of claims 13 and 14 under 35 USC 103(a) as being unpatentable over US patent 5,287,112 (*Schuermann*) in view of US patent 6,905,074 (*Charrat*) and further in view of US patent 5,491,715 (*Flaxl*)

Reconsideration of the rejection is respectfully requested in view of the amendment to the claims and the following observations.

Claims 13 and 14 depend from claim 1 and are likewise allowable in view of their dependency from claim 1 and their individually recited features. Moreover, *Flaxl* does not cure the deficiencies of *Schuermann* or *Charrat*.

Flaxl is directed to an automatic antenna tuning method and does not disclose a mechanism for monitoring or a device monitoring an actual property of the antenna circuit continuously.

Therefore, withdrawal of the rejection of the claims in view of the prior art is kindly requested.

5. Conclusion

As a result of the amendment to the claims, and further in view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that every pending claim in the present application be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the applicant's attorney, the examiner is invited to contact the undersigned at the numbers shown below.

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Respectfully submitted,

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